

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of the claims:

1. (Currently Amended) A SOI-based MEMS device comprising:
a base layer;
a device layer;
an insulator layer between the base layer and the device layer; and
a deposited layer having a portion that is spaced from the device layer;
the device layer being between the insulator layer and the deposited layer,
the device layer having structure, the deposited layer forming a cap to seal the
structure,
wherein the deposited layer includes germanium.
2. (Original) The MEMS device as defined by claim 1 further including an anchor
extending from the deposited layer to contact the device layer.
3. (Original) The MEMS device as defined by claim 1 wherein the device layer
includes circuitry.
4. (Original) The MEMS device as defined by claim 4 wherein the deposited layer
includes a material having a deposition temperature, the circuitry being capable of
operating after being subjected to the deposition temperature.
5. (Cancelled)

6. (Original) The MEMS device as defined by claim 1 wherein an air space separates the device layer from the deposited layer.

7. (Original) The MEMS device as defined by claim 6 wherein the device layer has a top surface with given material formed thereon, the air space separating the given material from the deposited layer.

8. (Currently Amended) A MEMS inertial sensor comprising:
a single crystal silicon layer having a top surface, the single crystal silicon layer also having sensing structure and a second component; and
a deposited additional layer adjacent to the top surface of the single crystal silicon layer, the deposited additional layer having a portion that is spaced from the top surface, the deposited additional layer being conductive to serve as an interconnect for the sensing structure on the single crystal silicon layer, the deposited additional layer electrically connecting the sensing structure with the second component
wherein the sensing structure includes a movable member spaced from the deposited additional layer by an air space.

9. (Original) The MEMS inertial sensor as defined by claim 8 wherein the deposited additional layer has a portion that is contacts the top surface.

10. (Original) The MEMS inertial sensor as defined by claim 8 wherein the single crystal silicon layer is a part of a silicon-on-insulator wafer, the sensor further including a base layer and an insulator layer separating the base layer and the single crystal silicon layer.

11. (Original) The MEMS inertial sensor as defined by claim 8 wherein the single crystal silicon layer is a bulk silicon wafer.

12. (Original) The MEMS inertial sensor as defined by claim 8 wherein at least an air space separates the top surface from the deposited additional layer.

13. (Cancelled)

14. (Previously Presented) The MEMS inertial sensor as defined by claim 8 wherein the second component includes circuitry, the deposited additional layer electrically connecting the sensing structure with the circuitry.

Claims 15-26 (Cancelled)

27. (New) A SOI-based MEMS device comprising:
a base layer;
a device layer;
an insulator layer between the base layer and the device layer; and
a deposited layer having a portion that is spaced from the device layer;
the device layer being between the insulator layer and the deposited layer,
the device layer having structure, the deposited layer forming a cap to seal the structure,

wherein an air space separates the device layer from the deposited layer,
further wherein the device layer has a top surface with given material formed thereon, the air space separating the given material from the deposited layer.

28. (New) The MEMS device as defined by claim 27 further including an anchor extending from the deposited layer to contact the device layer.

29. (New) The MEMS device as defined by claim 27 wherein the device layer includes circuitry.
30. (New) The MEMS device as defined by claim 29 wherein the deposited layer includes a material having a deposition temperature, the circuitry being capable of operating after being subjected to the deposition temperature.
31. (New) The MEMS device as defined by claim 27 wherein the deposited layer includes germanium.